



U. S. ELECTRICAR SEDAN

PERFORMANCE STATISTICS

ACCELERATION AT 90% SOC *

Zero to 30 mph: 6.5 sec
 Zero to 40 mph: 9.6 sec
 Zero to 50 mph: 14.3 sec
 Zero to 60 mph: 21.0 sec
 Performance Goal: 13.5 seconds; 0 to 60 mph

ACCELERATION AT 50% SOC *

Zero to 30 mph: 7.0 sec
 Zero to 40 mph: 10.6 sec
 Zero to 50 mph: 16.2 sec
 Zero to 60 mph: **24.9 sec**
 Performance Goal: 13.5 seconds; 0 to 60 mph

MAXIMUM SPEED

At 50% SOC: 81 mph
 Performance Goal: 70 mph

CONSTANT SPEED RANGE

45 mph Distance: 59.3 miles
 45 mph Energy Used: 12.4 kWhr
 45 mph Efficiency: 0.209 kWhr/mile
 45 mph Specific Energy: 0.0108 kWhr/lb
 60 mph Distance: 41.5 miles
 60 mph Energy Used: 11.7 kWhr
 60 mph Efficiency: 0.282 kWhr/mile
 60 mph Specific Energy: 0.0102 kWhr/lb

DRIVING CYCLE RANGE

77°F Distance: **45.90 miles**
 77°F Energy Used: 11.93 kWhr
 77°F Efficiency: 0.260 kWhr/mile
 77°F Specific Energy: 0.0104 kWhr/lb
 19°F Distance: **32.20 miles**
 19°F Energy Used: 9.57 kWhr
 19°F Efficiency: 0.296 kWhr/mile
 19°F Specific Energy: 0.0083 kWhr/lb
 Performance Goal: 60 miles

GRADEABILITY*

Maximum Grade: **23%**
 Performance Goal: 25%
 Speed At 3% Grade: 66 mph
 Performance Goal: 55 mph
 Speed At 6% Grade: 53 mph
 Performance Goal: 45 mph

HANDLING COURSE

Avg Time @ 90% SOC: 55.0 sec
 Avg Time @ 50% SOC: 55.0 sec
 Avg Time @ 20% SOC: 57.6 sec
 Avg Dodge Neon (ICE) Time: 54.62 sec
 Average Chevrolet S-10 Time: 58.29 sec

BRAKING STABILITY

Controlability: No Stability Problems
 Distance Dry/Wet: 157.6/203.9 feet

CHARGER

Ground Current During Charge: <0.01 mA
 Battery Leakage Current: <0.01 mA
 Charger Efficiency: 95.8%
 Average Power Factor: **0.937**
 Performance Goal: 0.95
 Average THD: **15.5%**
 Performance Goal: 5%
 Time From 80% DOD: **8 hours 12 minutes**
 Performance Goal: <8 hours

VEHICLE TYPE

Conversion Of: Geo Prizm
 VIN: 1YSK5304RZ092279
 Seating Capacity: 4 Adults
 Features: AM/FM Radio,
 Power Steering, Power
 Brakes, Front Wheel Drive
 & Front Disc Brakes

DIMENSIONS

Wheelbase: 96.8 inches
 Track F/R: 57.5/56.7 inches
 Length: 173.1 inches
 Width: 66.6 inches
 Height: 55.2 inches
 Ground Clearance: >50 mm
 Cargo Space: No Intrusion
 on OEM Space

WEIGHT

Curb Weight: 3420 lbs
 Test Weight: 3445 lbs
 Distribution F/R: 55/45 %
 Conversion GVWR: 4060 lbs
 OEM GVWR: 3510 lbs
 Payload: **615 lbs**

WHEELS & TIRES

Wheel Size: 14 inches
 Tire Mfg: Firestone
 Tire Size: P185/765R14
 Tire Pressure F/R: 35/35 psi
 Spare Installed: No

DRIVE SYSTEM

Drive Type: 50 kW AC Induction
 Motor Mfg: Hughes
 Controller Mfg: Hughes
 Transmission: Single Speed

BATTERY

Manufacturer: Hawker Energy
 Type: G12V26Ah10C Sealed Lead Acid
 Number of Modules: 50
 Total Traction Voltage: 300 volts
 Battery Pack Weight: 1150 lbs
 Locations In Vehicle: Below The
 Passenger Compartment

CHARGER

Location: Under Hood
 Input Voltage(s): 110/220 volts AC
 Input Current(s): 15/30 amperes AC

INTERLOCKS

Key Removable When Off Only: Yes
 Key Off In Park Only: **No**
 Start In Park Only: **No**
 Start Blocked By Accelerator: Yes
 Start Blocked On Charge: Yes

REQUIREMENTS

Manual Disconnect Present & Operational: Yes
 Batteries Sealed or Valve Regulated: Yes
 Charger Automatic Control: Yes
 SOC Indicator: Yes
 Battery Voltage Indicator: **No**
 Battery Current Indicator: **No**
 Regenerative Current Indicator: **No**
 Transmission Single Speed: Yes
 Transmission Parking Pawl: Yes
 No Open Access to High Voltage: Yes
 All High Voltage Clearly Marked: **No**
 Control Efforts Similar To OEM: Yes

Test Date: October 1994

Notes:

Bold - Results did not meet EV America
 Performance Goal

* - Tested at gross vehicle weight

TEST EXCEPTIONS

Payload 85 lbs less than required
Requires offboard transformer for charging
Charger/Controller GFI trips inadvertently
OEM GVWR re-certified by converter
Charge Complete Indicator lights prematurely

EV AMERICA